ABSTRACT

Example methods of fabricating semiconductor devices are disclosed. One example method may include depositing an oxide layer, a first conducting layer for a floating gate, a dielectric layer, and a second conducting layer for a control gate in sequence on a semiconductor substrate including a device isolation layer; forming gates by removing some parts of the oxide layer, the first conducting layer, the dielectric layer, and the second conducting layer; forming a mask pattern for a self-aligned source over the substrate including the gates; removing the device isolation layer exposed between the gates; performing an ion implantation process; and eliminating damage generated during the ion implantation process or the removal of the device isolation layer.